

WHAT IS CLAIMED IS:

1. An isolated polynucleotide comprising a member selected from the group consisting of:
 - (a) a polynucleotide encoding the polypeptide as set forth in SEQ ID NO:2;
 - (b) a polynucleotide encoding a mature polypeptide encoded by the DNA contained in ATCC Deposit No. 97183;
 - (c) a polynucleotide capable of hybridizing to and which is at least 70% identical to the polynucleotide of (a) or (b); and
 - (d) a polynucleotide fragment of the polynucleotide of (a), (b) or (c).
2. The polynucleotide of claim 1 wherein the polynucleotide is DNA.
3. A vector containing the DNA of Claim 2.
4. A host cell transformed or transfected with the vector of Claim 3.
5. A process for producing a polypeptide comprising: expressing from the host cell of Claim 4 the polypeptide encoded by said DNA.
6. A process for producing cells capable of expressing a polypeptide comprising transforming or transfecting the cells with the vector of Claim 3.
7. A receptor polypeptide comprising a member selected from the group consisting of:
 - (i) a polypeptide having the deduced amino acid sequence of SEQ ID NO:2 and fragments, analogs and derivatives thereof; and

(ii) a polypeptide encoded by the cDNA of ATCC
Deposit No. 9783 and fragments, analogs and derivatives of
said polypeptide.

8. The polypeptide of Claim 7 wherein the polypeptide has the deduced amino acid sequence of SEQ ID NO:2.

9. An antibody against the polypeptide of claim 7 selected from the group consisting of an antibody which agonizes the activity of the polypeptide and an antibody which antagonizes the activity of the polypeptide.

10. A compound which activates the polypeptide of claim 7.

11. A compound which inhibits activation the polypeptide of claim 7.

12. A method for the treatment of a patient having need to activate a G-protein chemokine receptor comprising: administering to the patient a therapeutically effective amount of the compound of claim 10.

13. A method for the treatment of a patient having need to inhibit a G-protein chemokine receptor comprising: administering to the patient a therapeutically effective amount of the compound of claim 11.

14. The method of claim 12 wherein said compound is a polypeptide and a therapeutically effective amount of the compound is administered by providing to the patient DNA encoding said agonist and expressing said agonist in vivo.

15. The method of claim 13 wherein said compound is a polypeptide and a therapeutically effective amount of the compound is administered by providing to the patient DNA encoding said antagonist and expressing said antagonist in vivo.

16. A method for identifying compounds which bind to and activate the receptor polypeptide of claim 7 comprising:

contacting a cell expressing on the surface thereof the receptor polypeptide, said receptor being associated with a second component capable of providing a detectable signal in response to the binding of a compound to said receptor polypeptide, with a compound under conditions sufficient to permit binding of the compound to the receptor polypeptide; and

identifying if the compound is an effective agonist by detecting the signal produced by said second component.

17. A method for identifying compounds which bind to and inhibit activation the polypeptide of claim 7 comprising:

contacting a cell expressing on the surface thereof the receptor polypeptide, said receptor being associated with a second component capable of providing a detectable signal in response to the binding of a compound to said receptor polypeptide, with a compound to be screened under conditions to permit binding to the receptor polypeptide; and

determining whether the compound inhibits activation of the polypeptide by detecting the absence of a signal generated from the interaction of the ligand with the polypeptide.

18. A process for diagnosing a disease or a susceptibility to a disease related to an under-expression of the polypeptide of claim 7 comprising:
determining a mutation in the nucleic acid sequence encoding said polypeptide.

19. The polypeptide of Claim 7 wherein the polypeptide is a soluble fragment of the polypeptide and is capable of binding a ligand for the receptor.

20. A diagnostic process comprising:
analyzing for the presence of the polypeptide of claim 19 in a sample derived from a host.

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B²

add
G²

add
H²